



Southern Region Annual HIV Epidemiological Profile

Data reported through June 30, 2018



Center for HIV Surveillance, Epidemiology and Evaluation Infectious Disease Prevention and Health Services Bureau Prevention and Health Promotion Administration http://phpa.health.maryland.gov/OIDEOR/CHSE 1-800-358-9001

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Section I - Background Information

HIV/AIDS Reporting Requirements

The Maryland HIV/AIDS Reporting Act of 2007 went into effect on April 24, 2007. The law expanded HIV/AIDS reporting and required that HIV cases be reported by name. The following highlights the reporting requirements of Health-General Articles 18-201.1, 18-202.1, and 18-205 of the Annotated Code of Maryland, as specified in the Code of Maryland Regulations (COMAR) 10.18.02.

- Physicians are required to report patients in their care with diagnoses of HIV or AIDS immediately to the Local Health Department where the physician's office is located by mailing the Maryland Confidential Morbidity Report (DHMH 1140). Reports are also accepted by phone.
- Physicians are required to report infants born to HIV positive mothers within 48 hours to the Maryland Department of Health by mailing the Maryland Confidential Morbidity Report (DHMH 1140). Reports are also accepted by phone.
- Clinical and infection control practitioners in hospitals, nursing homes, hospice facilities, medical clinics in correctional facilities, inpatient psychiatric facilities, and inpatient drug rehabilitation facilities are required to report patients in the care of the institution with diagnoses of HIV or AIDS within 48 hours to the Local Health Department where the institution is located by mailing the Maryland Confidential Morbidity Report (DHMH 1140). Reports are also accepted by phone. Facilities with large volumes are encouraged to contact the Maryland Department of Health to establish electronic reporting.
- Laboratory directors are required to report patients with laboratory results indicating HIV infection (e.g., positive confirmatory HIV diagnostic tests, all CD4 immunological tests, all HIV viral load tests, and all HIV genotype and phenotype tests) within 48 hours to the Local Health Department where the laboratory is located, or if out of state to the Maryland Department of Health, by mailing the State of Maryland HIV/CD4 Laboratory Reporting Form (DHMH 4492). Laboratories are encouraged to contact the Maryland Department of Health to establish electronic reporting.

Reporting forms and instructions, including mailing addresses and phones numbers, are available on our website: https://phpa.health.maryland.gov/OIDEOR/CHSE/Pages/reporting-material.aspx

For Assistance with HIV/AIDS Reporting

For assistance with reporting, including establishment of routine, electronic, or other alternate methods of reporting to the Maryland Department of Health, please contact the Center for HIV Surveillance, Epidemiology and Evaluation in the Maryland Department of Health at 410-767-5227.

Limitations in the HIV/AIDS Data

This epidemiological profile only contains data for HIV and AIDS cases that have been diagnosed by a health care provider, were reported to the health department by name, and were residents of Maryland at the time of diagnosis or are current residents of Maryland as of December 31, 2017. The most recent Centers for Disease Control and Prevention (CDC) estimate of the number of people living with undiagnosed HIV infection is 14.5 percent for the United States and 14.0 percent for Maryland in 2015. Using the CDC CD4 depletion model on Maryland surveillance data, the estimated number of people living with undiagnosed HIV infection in Maryland is 11.6 percent in 2016. Surveillance is the ongoing systematic collection, analysis, interpretation, and dissemination of case report data. Case report data are only available for cases receiving medical care, often only at facilities in Maryland, and only includes information that has been reported to the health department. Linkage to care data is based solely on laboratory data reported to the health department.

This epidemiological profile provides estimates of living Maryland diagnosed cases by current residence as of December 31, 2017. Residence at diagnosis and age at diagnosis are used exclusively to describe new HIV and AIDS diagnoses. Current residence data are restricted to cases for which there is a case report form or laboratory test reported since January 1, 2009. Restricting address data to recent years presents the most accurate data available and helps to account for cases that may have moved out of state whose data would no longer be reported in Maryland. However, current residence data excludes cases that may still be residents of Maryland but have not received any HIV care during

the most recent nine and a half years. In addition, residence is dynamic and cases may have resided at multiple addresses that cannot all be represented in single time point estimates.

This epidemiological profile contains data for transgender HIV and AIDS cases that have been diagnosed by a health care provider, were reported to the health department by name, and were residents of Maryland at the time of diagnosis or are current residents of Maryland as of December 31, 2017. Historically, it has been difficult to fully present data by current gender identification. Data on transgender people has been limited in the Maryland Department of Health's Enhanced HIV/AIDS Reporting System (eHARS). No reliable system exists for collecting or reporting gender identity and some agencies do not collect or have complete data on gender identity. This report is likely underreporting the number transgender HIV and AIDS cases because of challenges in accurately identifying and reporting gender identity in HIV surveillance.

Lastly, the completeness of reporting for race/ethnicity is variable in surveillance data. Definitions of race/ethnicity categories may vary across agencies and some agencies do not collect or have complete data on race/ethnicity. This report may be overreporting the number of Multiracial HIV and AIDS cases because of challenges in accurately identifying and reporting race/ethnicity in HIV surveillance.

For additional information regarding current residence, please contact the Center for HIV Surveillance, Epidemiology and Evaluation in the Maryland Department of Health at 410-767-5227.

Stages of a Case of HIV/AIDS

Untreated HIV disease progresses from HIV infection to AIDS to death. These are biological events that occur whether or not a person receives any medical care. For example, a person can be HIV infected but never have an HIV test and so they do not have an HIV diagnosis. A medical provider diagnoses that these biological events have occurred and records them as a medical event. The law requires medical providers to report these medical events to the Health Department, thereby creating a surveillance event.

Time Point	Biological Event	Medical Event	Surveillance Event
1	HIV Infection		
2		HIV Diagnosis	
3			HIV Report
4	AIDS Conditions		
5		AIDS Diagnosis	
6			AIDS Report
7	Death		
8		Death Diagnosis	
9			Death Report

A case of HIV/AIDS can only move through time in one direction, from HIV infection to death report [from time point 1 to time point 9], but may skip over individual stages. Events can occur simultaneously, but usually there is a time lag between them. The time lag between events can be measured in days, months, and years.

For example, the time between HIV infection [time point 1] and the test that diagnoses HIV [time point 2] may be several years, and it may then take several days for the laboratory and physician to report the diagnosis to the health department [time point 3]. In a second example, a person with diagnosed and reported HIV infection [time point 3] may die [time point 7] without developing AIDS, thereby skipping the three AIDS events (conditions, diagnosis, and report [time points 4, 5 and 6]). And in a third example, a person with undiagnosed HIV infection [time point 1] may become sick, enter the hospital, and die [time point 7] of what is later determined to be AIDS. In that situation, HIV diagnosis [time point 2], AIDS diagnosis [time point 5], and death diagnosis [time point 8] would all occur at the same time, and that would probably be many years after the initial HIV infection [time point 1].

Changes in Case Terminology

The terminology for HIV and AIDS cases was changed from earlier epidemiological profiles to be more precise, with Reported Diagnoses replacing Incidence and Living Cases replacing Prevalence. Incidence is a measure of the number of new events (such as HIV infections) in a population during a period of time. Prevalence is a measure of the number of people living with a condition (such as HIV) in a population at a certain time. Prevalence includes both newly and

previously diagnosed cases as well as undiagnosed infections. For HIV, Incidence and Prevalence cannot be directly measured and must be estimated using statistical methods. The HIV surveillance system is able to provide the actual number of diagnoses and deaths that are reported in the population.

For this epidemiological profile, reports received through a certain time (six months after December 31st of the specified year) are used to generate the number of diagnoses during the prior years. This lag time allows for delays in reporting and time to complete investigations. Instead of the previous one-year lag, this epidemiological profile utilizes a sixmonth lag, and as a result, data on exposure category and deaths for the prior year are preliminary. For example, the Reported HIV Diagnoses for 2017 are the total of the reported HIV cases with or without an AIDS diagnosis, diagnosed with HIV from January 1, 2017 through December 31, 2017, as reported by name through June 30, 2018.

To calculate the number of Living Cases we count all Reported Diagnoses from the beginning of the epidemic (all new cases each year) and subtract all Reported Deaths. For example, the Total Living HIV Cases on December 31, 2017 are the total reported HIV Cases with or without an AIDS diagnosis and not reported to have died as of June 30, 2018 as reported by name through June 30, 2018.

Laboratory Data

CD4+ T-lymphocyte tests are measures of a person's immune system function. An HIV infected adult is considered to have AIDS if they have less than 200 CD4+ cells per microliter of blood or if the percent of T-Lymphocyte cells that are CD4+ cells is less than 14 percent. Viral load (VL) tests are measures of the amount of HIV in a person's body. The goal of HIV treatment is to have a very low number of copies of virus per milliliter of blood, below what the test can measure, which is called an undetectable level. Low levels of VL, such as less than 200 copies per milliliter of blood, are known as viral suppression. Treatment recommendations are that a person in HIV medical care should have their CD4 and VL levels measured regularly, at least once per year. We use the presence of these lab tests as an indicator that someone has been "linked to care" after diagnosis or is "retained in care."

Sources of Data

Information on HIV and AIDS diagnoses, including residence at diagnosis, age, race/ethnicity, sex at birth, current gender, country of birth, vital status, HIV exposure category, and CD4 and HIV viral load test results are from the Maryland Department of Health's eHARS, June 30, 2018.

Population data by sex, age, and race/ethnicity are from the July 1, 2017 U.S. Census Estimates. Population data by country-of-birth are from the Census Bureau's 2016 American Community Survey. This produces a difference in total population due to the different source. Due to estimation limitations, some population totals may not equal the sum of its components. When needed, age groups were divided by assuming uniform age distribution within the age group. Non-Hispanic multiple race and Non-Hispanic some other race from the Census were combined into one group.

Estimations of those undiagnosed are from the Centers for Disease Control and Prevention's HIV Surveillance Supplemental Report published March 2018. The continuum of care is adapted from a 2011 article in Clinical Infectious Diseases in which a continuum of care "cascade" is used to illustrate estimates of the number of persons living with HIV who belong to each of the stages of engagement in HIV care.

Tabulation of Column Totals

Numbers in figures, tables and generally in the text have been rounded. Discrepancies in tables between totals and sums of components are due to rounding.

Data Suppression

In order to protect the confidentiality of reported HIV cases, data are suppressed in the following instances:

- Data describing a demographic group or geographic area (e.g. ZIP code) with a population less than 1,000 people.
- All clinical/laboratory information if it is describing less than 5 cases.
- If any cell is suppressed, additional cells are also suppressed as necessary to prevent back calculation of the suppressed cell(s).

Exposure/risk data is not suppressed due to statistical adjustment resulting in the reporting of estimated or probable risk.

HIV Exposure Categories

The Centers for Disease Control and Prevention (CDC) developed a hierarchy of exposure categories for surveillance purposes. Persons with more than one reported risk factor are classified in the exposure category listed first in the hierarchy and therefore counted only once. Men who report a history of sexual contact with other men and report injection drug use constitutes a separate transmission category.

MSM/IDU: Men who report a history of sexual contact with other men who also have engaged in injection drug use.

<u>Male-to-male Sexual Contact (MSM):</u> Men who report a history of sexual contact with other men (homosexual contact) including men who report sexual contact with both men and women (bisexual contact).

Injection Drug Use (IDU): Men or women who report receiving an injection, either self-administered or given by another person, of a drug that was not prescribed by a physician.

<u>Heterosexual Contact (HET)</u>: Men or women who report a history of sexual contact with a person of the opposite sex who is known to have an HIV infection or at high risk for an HIV infection. High risk groups include bisexual men, IDUs and recipients of blood, blood components, transplants of organ or tissue and artificial insemination.

Perinatal Exposure: Any baby born to an HIV positive mother.

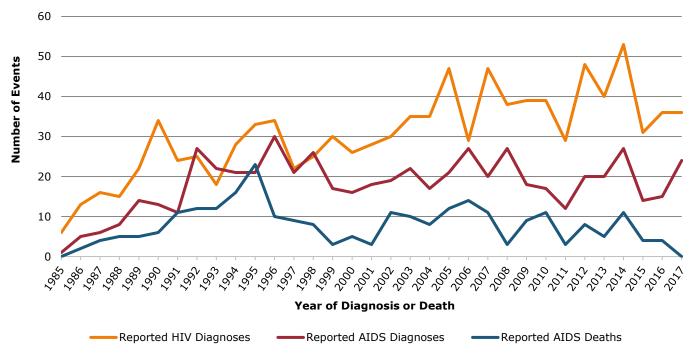
<u>Other Exposure</u>: Includes men or women who received clotting factor for hemophilia/coagulation disorder, or received a transfusion of blood/blood components, or received a transplant of tissue/organs or artificial insemination, or worked in a health care or clinical laboratory setting.

Not all exposure data is reported and is therefore missing for some cases. Multiple imputation is a statistical method by which missing exposure categories are replaced with estimated or probable exposure categories. Multiple imputation involves filling in the missing exposure category with multiple possible exposures, creating several complete datasets. Filling in the missing exposure category is done using the observed data for the individual case as well as data in aggregate from other cases in Maryland. The complete datasets, containing the various predictions for each missing exposure category, are combined to create a final dataset with previously missing exposure category replaced by weighted estimates. Perinatal transmission and other exposure categories are never estimated or adjusted and depict the reported exposure category.

Section II - Trends 1985-2017

<u>Figure 1 – Trends in Reported HIV and AIDS Diagnoses and Deaths, among Residents at Diagnosis, 1985-2017, Reported through June 30, 2018</u>

Reported HIV Cases with or without an AIDS Diagnosis (Reported HIV Diagnoses) by Year of HIV Diagnosis, Reported HIV Cases with an AIDS Diagnosis (Reported AIDS Diagnoses) by Year of AIDS Diagnosis, and Reported HIV Cases with an AIDS Diagnosis Reported to have Died of Any Cause (Reported AIDS Deaths) by Year of Death, from 1985 through 2017 as Reported through June 30, 2018

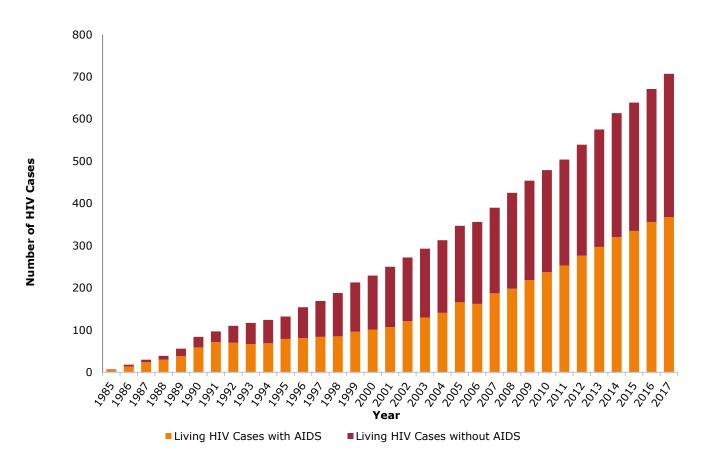


Year of Diagnosis or Death	Reported HIV Diagnoses	Reported AIDS Diagnoses	Reported AIDS Deaths	Year of Diagnosis or Death	Reported HIV Diagnoses	Reported AIDS Diagnoses	Reported AIDS Deaths
<1985	2	1	1	2001	28	18	3
1985	6	1	0	2002	30	19	11
1986	13	5	2	2003	35	22	10
1987	16	6	4	2004	35	17	8
1988	15	8	5	2005	47	21	12
1989	22	14	5	2006	29	27	14
1990	34	13	6	2007	47	20	11
1991	24	11	11	2008	38	27	3
1992	25	27	12	2009	39	18	9
1993	18	22	12	2010	39	17	11
1994	28	21	16	2011	29	12	3
1995	33	21	23	2012	48	20	8
1996	34	30	10	2013	40	20	5
1997	22	21	9	2014	53	27	11
1998	25	26	8	2015	31	14	4
1999	30	17	3	2016*	36	15	4
2000	26	16	5	2017*	36	24	0
				Total	1,013	598	259

^{*2016-2017} reported AIDS deaths are preliminary

<u>Figure 2 – Trends in Living HIV Cases, among Residents at Diagnosis, 1985-2017, Reported through June 30, 2018</u>

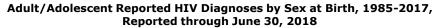
Reported HIV Cases with or without an AIDS Diagnosis and Not Reported to have Died as of December 31st of Each Year (Living HIV Cases without AIDS, Living HIV Cases with AIDS, and Total Living HIV Cases) from 1985 through 2017, as Reported through June 30, 2018

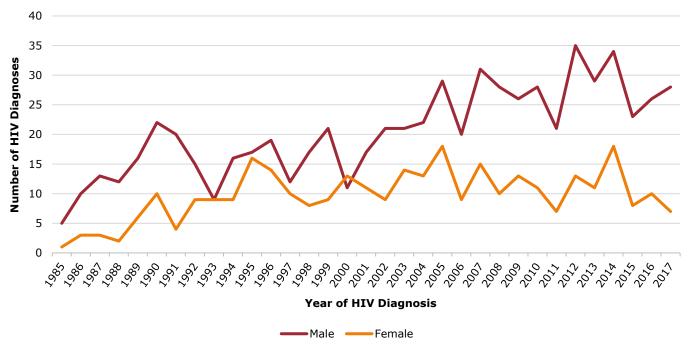


Year	Living HIV Cases without AIDS	Living HIV Cases with AIDS	Total Living HIV Cases	Year	Living HIV Cases without AIDS	Living HIV Cases with AIDS	Total Living HIV Cases
1985	6	1	7	2002	121	151	272
1986	14	4	18	2003	130	163	293
1987	24	6	30	2004	141	172	313
1988	30	9	39	2005	166	181	347
1989	38	18	56	2006	162	194	356
1990	59	25	84	2007	187	203	390
1991	72	25	97	2008	198	227	425
1992	70	40	110	2009	218	236	454
1993	67	50	117	2010	237	242	479
1994	69	55	124	2011	253	251	504
1995	79	53	132	2012	276	263	539
1996	81	73	154	2013	297	278	575
1997	84	85	169	2014	320	294	614
1998	85	103	188	2015	335	304	639
1999	96	117	213	2016	356	315	671
2000	101	128	229	2017	368	339	707
2001	107	143	250				

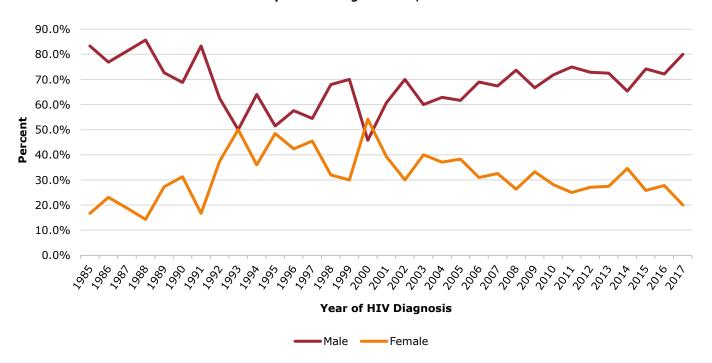
<u>Figure 3 – Trends in Adult/Adolescent Reported HIV Diagnoses by Sex at Birth, among Residents at Diagnosis, 1985-2017, Reported through June 30, 2018</u>

Number and Percent by Sex at Birth of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis (Adult/Adolescent Reported HIV Diagnoses) by Year of HIV Diagnosis from 1985 through 2017, as Reported through June 30, 2018





Adult/Adolescent Reported HIV Diagnoses by Sex at Birth, 1985-2017, Reported through June 30, 2018



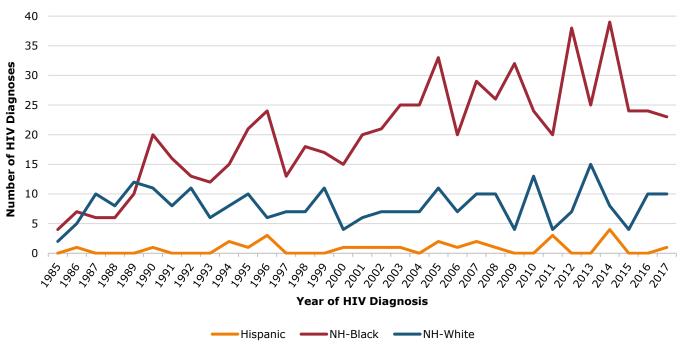
Adult/Adolescent Reported HIV Diagnoses

Vone of HTV Dinamosis	_		Birth			
Year of HIV Diagnosis	No.	Male	•	Female	9	
		No.	%	No.	%	
<1985	2	2	100.0%	0	0.0%	
1985	6	5	83.3%	1	16.7%	
1986	13	10	76.9%	3	23.1%	
1987	16	13	81.3%	3	18.8%	
1988	14	12	85.7%	2	14.3%	
1989	22	16	72.7%	6	27.3%	
1990	32	22	68.8%	10	31.3%	
1991	24	20	83.3%	4	16.7%	
1992	24	15	62.5%	9	37.5%	
1993	18	9	50.0%	9	50.0%	
1994	25	16	64.0%	9	36.0%	
1995	33	17	51.5%	16	48.5%	
1996	33	19	57.6%	14	42.4%	
1997	22	12	54.5%	10	45.5%	
1998	25	17	68.0%	8	32.0%	
1999	30	21	70.0%	9	30.0%	
2000	24	11	45.8%	13	54.2%	
2001	28	17	60.7%	11	39.3%	
2002	30	21	70.0%	9	30.0%	
2003	35	21	60.0%	14	40.0%	
2004	35	22	62.9%	13	37.1%	
2005	47	29	61.7%	18	38.3%	
2006	29	20	69.0%	9	31.0%	
2007	46	31	67.4%	15	32.6%	
2008	38	28	73.7%	10	26.3%	
2009	39	26	66.7%	13	33.3%	
2010	39	28	71.8%	11	28.2%	
2011	28	21	75.0%	7	25.0%	
2012	48	35	72.9%	13	27.1%	
2013	40	29	72.5%	11	27.5%	
2014	52	34	65.4%	18	34.6%	
2015	31	23	74.2%	8	25.8%	
2016	36	26	72.2%	10	27.8%	
2017	35	28	80.0%	7	20.0%	
Total	999	676	67.7%	323	32.3%	

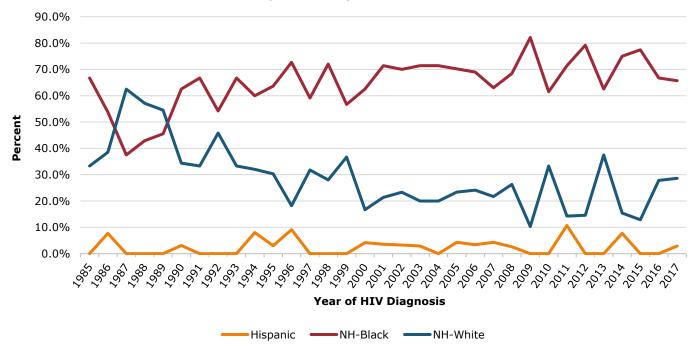
<u>Figure 4 – Trends in Adult/Adolescent Reported HIV Diagnoses by Race/Ethnicity, among Residents at Diagnosis, 1985-2017, Reported through June 30, 2018</u>

Number and Percent by Race/Ethnicity of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis (Adult/Adolescent Reported HIV Diagnoses) by Year of HIV Diagnosis from 1985 through 2017, as Reported through June 30, 2018





Adult/Adolescent Reported HIV Diagnoses by Race/Ethnicity, 1985-2017, Reported through June 30, 2018



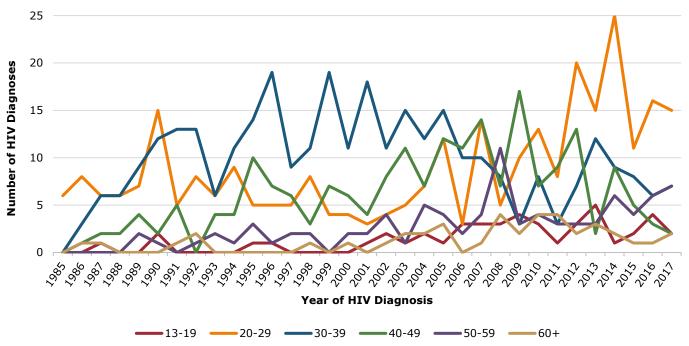
Non-Hispanic Other race not shown

	Adult/Adolescent Reported HIV Diagnoses												
Year of	_			Race/Ethnicity									
HIV Diagnosis	No.	Hispa	nic	Non-His Black,		Non-His White,		Non-Hispanic Other Race					
		No.	%	No.	%	No.	%	No.	%				
<1985	2	0	0.0%	1	50.0%	1	50.0%	0	0.0%				
1985	6	0	0.0%	4	66.7%	2	33.3%	0	0.0%				
1986	13	1	7.7%	7	53.8%	5	38.5%	0	0.0%				
1987	16	0	0.0%	6	37.5%	10	62.5%	0	0.0%				
1988	14	0	0.0%	6	42.9%	8	57.1%	0	0.0%				
1989	22	0	0.0%	10	45.5%	12	54.5%	0	0.0%				
1990	32	1	3.1%	20	62.5%	11	34.4%	0	0.0%				
1991	24	0	0.0%	16	66.7%	8	33.3%	0	0.0%				
1992	24	0	0.0%	13	54.2%	11	45.8%	0	0.0%				
1993	18	0	0.0%	12	66.7%	6	33.3%	0	0.0%				
1994	25	2	8.0%	15	60.0%	8	32.0%	0	0.0%				
1995	33	1	3.0%	21	63.6%	10	30.3%	1	3.0%				
1996	33	3	9.1%	24	72.7%	6	18.2%	0	0.0%				
1997	22	0	0.0%	13	59.1%	7	31.8%	2	9.1%				
1998	25	0	0.0%	18	72.0%	7	28.0%	0	0.0%				
1999	30	0	0.0%	17	56.7%	11	36.7%	2	6.7%				
2000	24	1	4.2%	15	62.5%	4	16.7%	4	16.7%				
2001	28	1	3.6%	20	71.4%	6	21.4%	1	3.6%				
2002	30	1	3.3%	21	70.0%	7	23.3%	1	3.3%				
2003	35	1	2.9%	25	71.4%	7	20.0%	2	5.7%				
2004	35	0	0.0%	25	71.4%	7	20.0%	3	8.6%				
2005	47	2	4.3%	33	70.2%	11	23.4%	1	2.1%				
2006	29	1	3.4%	20	69.0%	7	24.1%	1	3.4%				
2007	46	2	4.3%	29	63.0%	10	21.7%	5	10.9%				
2008	38	1	2.6%	26	68.4%	10	26.3%	1	2.6%				
2009	39	0	0.0%	32	82.1%	4	10.3%	3	7.7%				
2010	39	0	0.0%	24	61.5%	13	33.3%	2	5.1%				
2011	28	3	10.7%	20	71.4%	4	14.3%	1	3.6%				
2012	48	0	0.0%	38	79.2%	7	14.6%	3	6.3%				
2013	40	0	0.0%	25	62.5%	15	37.5%	0	0.0%				
2014	52	4	7.7%	39	75.0%	8	15.4%	1	1.9%				
2015	31	0	0.0%	24	77.4%	4	12.9%	3	9.7%				
2016	36	0	0.0%	24	66.7%	10	27.8%	2	5.6%				
2017	35	1	2.9%	23	65.7%	10	28.6%	1	2.9%				
Total	999	26	2.6%	666	66.7%	267	26.7%	40	4.0%				

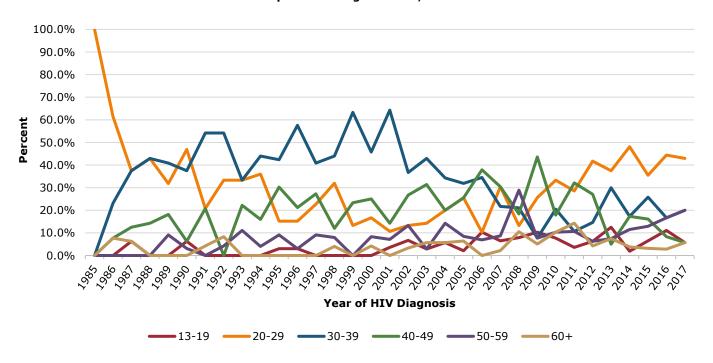
<u>Figure 5 – Trends in Adult/Adolescent Reported HIV Diagnoses by Age at Diagnosis, among Residents at Diagnosis, 1985-2017, Reported through June 30, 2018</u>

Number and Percent by Age at HIV Diagnosis of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis (Adult/Adolescent Reported HIV Diagnoses) by Year of HIV Diagnosis from 1985 through 2017, as Reported through June 30, 2018





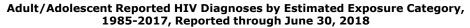
Adult/Adolescent Reported HIV Diagnoses by Age at Diagnosis, 1985-2017, Reported through June 30, 2018

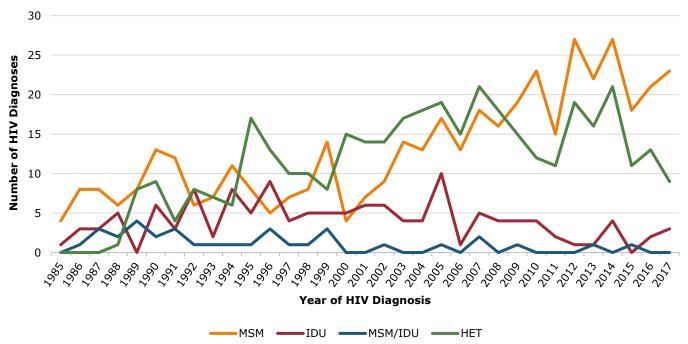


	Adult/Adolescent Reported HIV Diagnoses													
Year of HIV						Ag	e at HIV	Diagnos	sis					
Diagnosis	No.	Age 13-19		Age	Age 20-29		Age 30-39		Age 40-49		Age 50-59		Age 60+	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
<1985	2	1	50.0%	0	0.0%	0	0.0%	1	50.0%	0	0.0%	0	0.0%	
1985	6	0	0.0%	6	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	
1986	13	0	0.0%	8	61.5%	3	23.1%	1	7.7%	0	0.0%	1	7.7%	
1987	16	1	6.3%	6	37.5%	6	37.5%	2	12.5%	0	0.0%	1	6.3%	
1988	14	0	0.0%	6	42.9%	6	42.9%	2	14.3%	0	0.0%	0	0.0%	
1989	22	0	0.0%	7	31.8%	9	40.9%	4	18.2%	2	9.1%	0	0.0%	
1990	32	2	6.3%	15	46.9%	12	37.5%	2	6.3%	1	3.1%	0	0.0%	
1991	24	0	0.0%	5	20.8%	13	54.2%	5	20.8%	0	0.0%	1	4.2%	
1992	24	0	0.0%	8	33.3%	13	54.2%	0	0.0%	1	4.2%	2	8.3%	
1993	18	0	0.0%	6	33.3%	6	33.3%	4	22.2%	2	11.1%	0	0.0%	
1994	25	0	0.0%	9	36.0%	11	44.0%	4	16.0%	1	4.0%	0	0.0%	
1995	33	1	3.0%	5	15.2%	14	42.4%	10	30.3%	3	9.1%	0	0.0%	
1996	33	1	3.0%	5	15.2%	19	57.6%	7	21.2%	1	3.0%	0	0.0%	
1997	22	0	0.0%	5	22.7%	9	40.9%	6	27.3%	2	9.1%	0	0.0%	
1998	25	0	0.0%	8	32.0%	11	44.0%	3	12.0%	2	8.0%	1	4.0%	
1999	30	0	0.0%	4	13.3%	19	63.3%	7	23.3%	0	0.0%	0	0.0%	
2000	24	0	0.0%	4	16.7%	11	45.8%	6	25.0%	2	8.3%	1	4.2%	
2001	28	1	3.6%	3	10.7%	18	64.3%	4	14.3%	2	7.1%	0	0.0%	
2002	30	2	6.7%	4	13.3%	11	36.7%	8	26.7%	4	13.3%	1	3.3%	
2003	35	1	2.9%	5	14.3%	15	42.9%	11	31.4%	1	2.9%	2	5.7%	
2004	35	2	5.7%	7	20.0%	12	34.3%	7	20.0%	5	14.3%	2	5.7%	
2005	47	1	2.1%	12	25.5%	15	31.9%	12	25.5%	4	8.5%	3	6.4%	
2006	29	3	10.3%	3	10.3%	10	34.5%	11	37.9%	2	6.9%	0	0.0%	
2007	46	3	6.5%	14	30.4%	10	21.7%	14	30.4%	4	8.7%	1	2.2%	
2008	38	3	7.9%	5	13.2%	8	21.1%	7	18.4%	11	28.9%	4	10.5%	
2009	39	4	10.3%	10	25.6%	3	7.7%	17	43.6%	3	7.7%	2	5.1%	
2010	39	3	7.7%	13	33.3%	8	20.5%	7	17.9%	4	10.3%	4	10.3%	
2011	28	1	3.6%	8	28.6%	3	10.7%	9	32.1%	3	10.7%	4	14.3%	
2012	48	3	6.3%	20	41.7%	7	14.6%	13	27.1%	3	6.3%	2	4.2%	
2013	40	5	12.5%	15	37.5%	12	30.0%	2	5.0%	3	7.5%	3	7.5%	
2014	52	1	1.9%	25	48.1%	9	17.3%	9	17.3%	6	11.5%	2	3.8%	
2015	31	2	6.5%	11	35.5%	8	25.8%	5	16.1%	4	12.9%	1	3.2%	
2016	36	4	11.1%	16	44.4%	6	16.7%	3	8.3%	6	16.7%	1	2.8%	
2017	35	2	5.7%	15	42.9%	7	20.0%	2	5.7%	7	20.0%	2	5.7%	
Total	999	47	4.7%	293	29.3%	324	32.4%	205	20.5%	89	8.9%	41	4.1%	

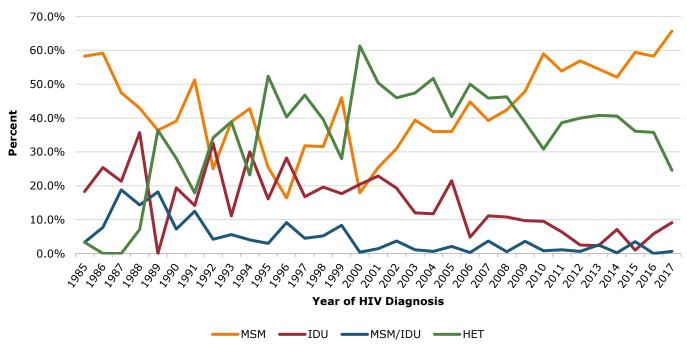
<u>Figure 6 – Trends in Adult/Adolescent Reported HIV Diagnoses by Estimated</u> <u>Exposure Category, among Residents at Diagnosis, 1985-2017, Reported through</u> June 30, 2018

Number and Percent by Estimated Exposure Category[§] of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis (Adult/Adolescent Reported HIV Diagnoses) by Year of HIV Diagnosis from 1985 through 2017, as Reported through June 30, 2018





Adult/Adolescent Reported HIV Diagnoses by Estimated Exposure Category, 1985-2017, Reported through June 30, 2018



Other exposure category not shown

§ Multiple imputation was used to estimate and adjust for missing transmission category.

_	Adult/Adolescent Reported HIV Diagnoses											
Year of		% with				Estima	ted Expo	sure Cate	egory§			
HIV Diagnosis	No.	No Reported	М	SM	IC	υ	MSM	/IDU	н	ET		ner sure
		Exposure [¥]	No.	%	No.	%	No.	%	No.	%	No.	%
<1985	2	0.0%	2	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
1985	6	16.7%	4	58.3%	1	18.3%	0	3.3%	0	3.3%	1	16.7%
1986	13	7.7%	8	59.2%	3	25.4%	1	7.7%	0	0.0%	1	7.7%
1987	16	12.5%	8	47.5%	3	21.3%	3	18.8%	0	0.0%	2	12.5%
1988	14	0.0%	6	42.9%	5	35.7%	2	14.3%	1	7.1%	0	0.0%
1989	22	0.0%	8	36.4%	0	0.0%	4	18.2%	8	36.4%	2	9.1%
1990	32	6.3%	13	39.1%	6	19.4%	2	7.2%	9	28.1%	2	6.3%
1991	24	8.3%	12	51.3%	3	14.2%	3	12.5%	4	17.9%	1	4.2%
1992	24	4.2%	6	25.0%	8	32.5%	1	4.2%	8	34.2%	1	4.2%
1993	18	0.0%	7	38.9%	2	11.1%	1	5.6%	7	38.9%	1	5.6%
1994	25	8.0%	11	42.8%	8	30.0%	1	4.0%	6	23.2%	0	0.0%
1995	33	9.1%	8	25.5%	5	16.1%	1	3.0%	17	52.4%	1	3.0%
1996	33	18.2%	5	16.4%	9	28.2%	3	9.1%	13	40.3%	2	6.1%
1997	22	4.5%	7	31.8%	4	16.8%	1	4.5%	10	46.8%	0	0.0%
1998	25	20.0%	8	31.6%	5	19.6%	1	5.2%	10	39.6%	1	4.0%
1999	30	16.7%	14	46.0%	5	17.7%	3	8.3%	8	28.0%	0	0.0%
2000	24	16.7%	4	17.9%	5	20.4%	0	0.4%	15	61.3%	0	0.0%
2001	28	21.4%	7	25.4%	6	22.9%	0	1.4%	14	50.4%	0	0.0%
2002	30	13.3%	9	31.0%	6	19.3%	1	3.7%	14	46.0%	0	0.0%
2003	35	25.7%	14	39.4%	4	12.0%	0	1.1%	17	47.4%	0	0.0%
2004	35	28.6%	13	36.0%	4	11.7%	0	0.6%	18	51.7%	0	0.0%
2005	47	23.4%	17	36.0%	10	21.5%	1	2.1%	19	40.4%	0	0.0%
2006	29	20.7%	13	44.8%	1	4.8%	0	0.3%	15	50.0%	0	0.0%
2007	46	39.1%	18	39.3%	5	11.1%	2	3.7%	21	45.9%	0	0.0%
2008	38	31.6%	16	42.4%	4	10.8%	0	0.5%	18	46.3%	0	0.0%
2009	39	61.5%	19	47.9%	4	9.7%	1	3.6%	15	38.7%	0	0.0%
2010	39	61.5%	23	59.0%	4	9.5%	0	0.8%	12	30.8%	0	0.0%
2011	28	50.0%	15	53.9%	2	6.4%	0	1.1%	11	38.6%	0	0.0%
2012	48	22.9%	27	56.9%	1	2.5%	0	0.6%	19	40.0%	0	0.0%
2013	40	27.5%	22	54.5%	1	2.3%	1	2.5%	16	40.8%	0	0.0%
2014	52	17.3%	27	52.1%	4	7.1%	0	0.2%	21	40.6%	0	0.0%
2015	31	9.7%	18	59.4%	0	1.0%	1	3.5%	11	36.1%	0	0.0%
2016	36	11.1%	21	58.3%	2	5.8%	0	0.0%	13	35.8%	0	0.0%
2017	35	25.7%	23	65.7%	3	9.1%	0	0.6%	9	24.6%	0	0.0%
Total	999	22.0%	432	43.3%	135	13.5%	37	3.7%	379	38.0%	15	1.5%
C 14 11: 1 :		1										

[§] Multiple imputation was used to estimate and adjust for missing transmission category

Note. Discrepancies in the table between total HIV diagnoses and the sums by exposure category are due to less than 1 percent of cases missing transmission category after multiple imputation

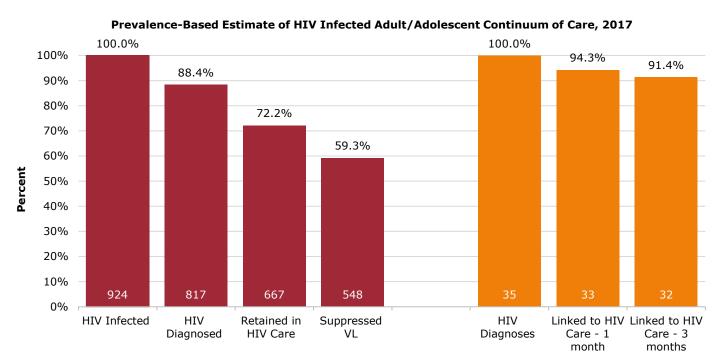
^{*}Percent with no reported exposure prior to multiple imputation adjustment

Section III - Continuum of Care Cascades

In their 2011 article in Clinical Infectious Diseases, Gardner et al.¹ utilize a continuum of care "cascade" to illustrate estimates of the number of persons living with HIV who belong to each of the stages of engagement in HIV care.

<u>Figure 7 – Prevalence-Based Estimated Adult/Adolescent 2017 HIV Continuum of Care Cascades, Current Southern Region Residents, Reported through June 30,2018</u>

The prevalence-based Southern Region Engagement in HIV Care Cascade (below) applies the Centers for Disease Control and Prevention (CDC) CD4 depletion model to Maryland surveillance data, reported through June 30, 2018, to estimate the number of people living with undiagnosed HIV (11.6 percent) and the estimated number of HIV infected persons currently residing in Maryland. Maryland surveillance data is then used to describe the number and percentage of persons living with HIV in the Southern Region on December 31, 2017 and the number and percentage of new HIV diagnoses in 2017 who belong to each of the stages of engagement in HIV care.



Among current Southern Region residents living with HIV

Among 2017 HIV diagnoses

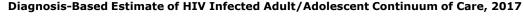
Continuum of Care Stage	Living H	IIV Cases	Combination of Comp Store	New Diagnoses		
	Number	Percentage	Continuum of Care Stage	Number	Percentage	
HIV Infected	924	100.0%	New HIV Diagnoses	35	100.0%	
HIV Diagnosed	817	88.4%	Linked to HIV Care - 1 Month	33	94.3%	
Retained in HIV Care	667	72.2%	Linked to HIV Care - 3 Months	32	91.4%	
Suppressed VL	548	59.3%				

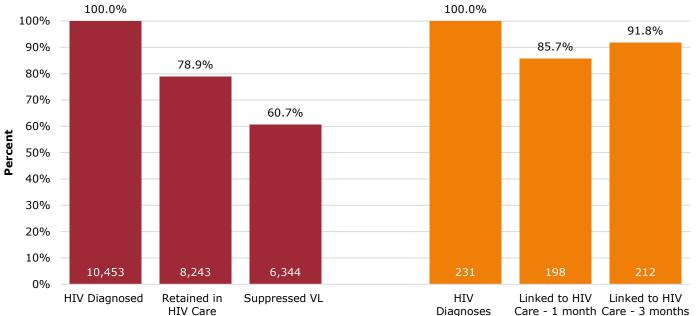
¹ Gardner et al, "The Spectrum of Engagement in HIV Care and its Relevance to Test-and-Treat Strategies for Prevention of HIV Infection." Clin Infect Dis. 2011; 52 (6): 793-800.

² Centers for Disease Control and Prevention. Estimated HIV incidence and prevalence in the United States, 2010–2015. HIV Surveillance Supplemental Report 2018;23(No. 1). http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html. Published March 2018.

<u>Figure 8 – Diagnosis-Based Estimated Adult/Adolescent 2017 HIV Continuum of Care</u> Cascades, Current Southern Region Residents, Reported through June 30, 2018

The diagnosis-based Southern Region Engagement in HIV Care Cascade (below) uses Maryland surveillance data for current Southern Region residents to describe the number and percentage of persons living with HIV in Southern Region on December 31, 2017 and the number and percentage of new HIV diagnoses in 2017 who belong to each of the stages of engagement in HIV care.





Among current Southern Region residents diagnosed with HIV

Among 2017 HIV Diagnoses

Continuum of Care Stage	Living H	IIV Cases	Continuum of Care Stage	New Diagnoses		
	Number	Percentage	Continuum of Care Stage	Number	Percentage	
HIV Diagnosed	817	100.0%	New HIV Diagnoses	35	100.0%	
Retained in HIV Care	667	81.6%	Linked to HIV Care - 1 Month	33	94.3%	
Suppressed VL	548	67.1%	Linked to HIV Care – 3 Months	32	91.4%	

Section IV - Adult/Adolescent Cases by Jurisdiction

<u>Table 1 – Adult/Adolescent HIV Diagnoses during 2017, Linked to Care, Late Diagnosis, and First CD4 Test Result by Jurisdiction of Residence at HIV Diagnosis, Reported through June 30, 2018</u>

		Adult/Adolescent Reported HIV Diagnoses								
Jurisdiction of Residence at HIV Diagnosis	Population Age 13+	N-	% of	Rate —	Linked to Care		Late HIV Diagnoses	First CD4 Test Result		
	Age 13 i	No.	Total		% 1 mo.	% 3 mo.	%	%	Median Count	
Calvert	76,935	5	14.3%	6.5	80.0%	100.0%	***	100.0%	32	
Charles	132,657	24	68.6%	18.1	95.8%	95.8%	37.5%	95.8%	284	
Saint Mary's	92,931	6	17.1%	6.5	83.3%	83.3%	***	100.0%	354	
Total	302,524	35	100.0%	11.6	91.4%	94.3%	37.1%	97.1%	277	

^{***} Data withheld due to low population counts and/or case counts

<u>Table 2 – Adult/Adolescent AIDS Diagnoses during 2017, Mean Years from HIV Diagnosis and Percent Late HIV Diagnosis, by Jurisdiction of Residence at AIDS Diagnosis, Reported through June 30, 2018</u>

		1	t Reported A	ed AIDS Diagnoses				
Jurisdiction of Residence at AIDS Diagnosis	Population Age 13+	No.	% of Total	Rate	Mean Years from HIV Diagnosis	% Late HIV Diagnosis		
Calvert	76,935	6	25.0%	7.8	***	***		
Charles	132,657	15	62.5%	11.3	3.1	60.0%		
Saint Mary's	92,931	3	12.5%	3.2	***	***		
Total	302,524	24	100.0%	7.9	4.2	58.3%		

^{***} Data withheld due to low population counts and/or case counts

<u>Table 3 – Adult/Adolescent HIV Cases Alive on December 31, 2017, by Jurisdiction of Residence at Diagnosis, Reported through June 30, 2018</u>

Jurisdiction of Residence	Population		Adolescen ses witho	_		/Adolesce Cases wit	_	Adult/	Adolescent Ca:	t Total Liv ses	ing HIV
at Diagnosis	Age 13+	No.	% of Total	Rate	No.	% of Total	Rate	No.	% of Total	Rate	Ratio (1 in X)
Calvert	76,935	53	14.5%	68.9	61	18.0%	79.3	114	16.2%	148.2	674
Charles	132,657	243	66.6%	183.2	206	60.8%	155.3	449	63.8%	338.5	295
Saint Mary's	92,931	69	18.9%	74.2	72	21.2%	77.5	141	20.0%	151.7	659
Total	302,524	365	100.0%	120.7	339	100.0%	112.1	704	100.0%	232.7	429

^{***} Data withheld due to low population counts and/or case counts

<u>Table 4 – Adult/Adolescent HIV Cases Alive on December 31, 2017, by Jurisdiction of</u> Residence at Diagnosis and Current Residence, Reported through June 30, 2018

		Adult/Adolescent Total Living HIV Cases								
Population	Residence at Diagnosis						- %			
Age 13+ -	No.	% of Total	Rate	Ratio (1 in X)	No.	% of Total	Rate	Ratio (1 in X)	Change	
76,935	114	16.2%	148.2	674	130	15.9%	169.0	591	14.0%	
132,657	449	63.8%	338.5	295	518	63.4%	390.5	256	15.4%	
92,931	141	20.0%	151.7	659	169	20.7%	181.9	549	19.9%	
302,524	704	100.0%	232.7	429	817	100.0%	270.1	370	16.1%	
	76,935 132,657 92,931	Age 13+ No. 76,935 114 132,657 449 92,931 141	Age 13+ No. % of Total 76,935 114 16.2% 132,657 449 63.8% 92,931 141 20.0%	Population Age 13+ Residence at Diagnos Wood of Your Protein Williams 76,935 114 16.2% 148.2 132,657 449 63.8% 338.5 92,931 141 20.0% 151.7	Population Age 13+ Residence at Diagnosis No. % of Total Rate (1 in X) 76,935 114 16.2% 148.2 674 132,657 449 63.8% 338.5 295 92,931 141 20.0% 151.7 659	Population Age 13+ Residence at Diagnosis No. % of Total Rate (1 in X) Ratio (1 in X) No. 76,935 114 16.2% 148.2 674 130 132,657 449 63.8% 338.5 295 518 92,931 141 20.0% 151.7 659 169	Population Age 13+ Residence at Diagnosis Current R No. % of Total Rate (1 in X) No. % of Total 76,935 114 16.2% 148.2 674 130 15.9% 132,657 449 63.8% 338.5 295 518 63.4% 92,931 141 20.0% 151.7 659 169 20.7%	Population Age 13+ Residence at Diagnosis Current Residence No. % of Total Rate (1 in X) No. % of Total Rate 76,935 114 16.2% 148.2 674 130 15.9% 169.0 132,657 449 63.8% 338.5 295 518 63.4% 390.5 92,931 141 20.0% 151.7 659 169 20.7% 181.9	Population Age 13+ Residence at Diagnosis Current Residence No. % of Total Ratio (1 in X) No. % of Total Rate (1 in X) 76,935 114 16.2% 148.2 674 130 15.9% 169.0 591 132,657 449 63.8% 338.5 295 518 63.4% 390.5 256 92,931 141 20.0% 151.7 659 169 20.7% 181.9 549	

^{***} Data withheld due to low population counts and/or case counts

<u>Table 5 – CD4 Test Results during 2017 for Adult/Adolescent HIV Cases Alive on</u>
<u>December 31, 2017, by Jurisdiction of Current Residence, Reported through June 30,</u>
2018

			Adult/Ad	lolescent Tot	tal Living H	IV Cases		
Jurisdiction of Current				Result	sult			
Residence	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+
Calvert	130	105	80.8%	661	7.6%	12.4%	18.1%	61.9%
Charles	518	413	79.7%	604	10.4%	11.6%	14.8%	63.2%
Saint Mary's	169	130	76.9%	573	9.2%	16.9%	16.2%	57.7%
Total	817	648	79.3%	602	9.7%	12.8%	15.6%	61.9%

<u>Table 6 – Viral Load Test Results during 2017 for Adult/Adolescent HIV Cases Alive</u> on December 31, 2017, by Jurisdiction of Current Residence, Reported through June 30, 2018

		Adult/Adole	scent Total Livin	g HIV Cases						
Jurisdiction of Current		Recent Viral Load Test Result								
Residence	No.	No. with Test	% with Test	% Suppressed	Median Unsuppressed					
Calvert	130	103	79.2%	90.3%	4,805					
Charles	518	419	80.9%	83.5%	10,297					
Saint Mary's	169	128	75.7%	82.0%	4,461					
Total	817	650	79.6%	84.3%	7,835					

Section V - Cases by Age

<u>Table 7 – HIV Diagnoses during 2017, Linked to Care, Late Diagnosis, and First CD4</u> <u>Test Result by Age at HIV Diagnosis, Reported through June 30, 2018</u>

					Reported	HIV Diag	ınoses		
Age at HIV Diagnosis	Population	N-	% of		Linked to Care		Late HIV Diagnoses	First CD4 Test Result	
Diagnosis		No.	Total	Rate -	% 1 mo.	% 3 mo.	%	%	Median Count
<5 (Pediatric)	21,951	1	2.8%	4.6	***	***	***	***	***
5-12 (Pediatric)	39,394	0	0.0%	0.0					
13-19	35,511	2	5.6%	5.6	***	***	***	***	***
20-29	46,514	15	41.7%	32.2	86.7%	86.7%	***	93.3%	303
30-39	46,507	7	19.4%	15.1	100.0%	100.0%	***	100.0%	473
40-49	49,017	2	5.6%	4.1	***	***	***	***	***
50-59	57,188	7	19.4%	12.2	85.7%	100.0%	71.4%	100.0%	150
60+	67,787	2	5.6%	3.0	***	***	***	***	***
Total	363,869	36	100.0%	9.9	91.7%	94.4%	36.1%	97.2%	284

^{***} Data withheld due to low population counts and/or case counts

<u>Table 8 – HIV Cases Alive on December 31, 2017, by Age on December 31, 2017,</u> Reported through June 30, 2018

Age on			То	tal Living HIV Case	es	
December 31, 2017	Population	No.	% of Total	% Living with AIDS	Rate	Ratio (1 in X)
<5	21,951	2	0.2%	0.0%	9.1	10,975
5-12	39,394	3	0.4%	0.0%	7.6	13,131
13-19	35,511	4	0.5%	25.0%	11.3	8,877
20-29	46,514	109	13.3%	24.8%	234.3	426
30-39	46,507	158	19.2%	39.9%	339.7	294
40-49	49,017	180	21.9%	58.3%	367.2	272
50-59	57,188	269	32.7%	64.3%	470.4	212
60+	67,787	97	11.8%	69.1%	143.1	698
Total	363,869	822	100.0%	53.0%	225.9	442

<u>Table 9 - CD4 Test Results during 2017 for Adult/Adolescent HIV Cases Alive on December 31, 2017, by Age on December 31, 2017, Reported through June 30, 2018</u>

Ago on -			Adult/A	dolescent Tot	al Living HI	V Cases		
Age on - December 31,				Recent	CD4 Test R	esults		
2017	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+
13-19	4	***	***	***	***	***	***	***
20-29	109	84	77.1%	590	10.7%	17.9%	11.9%	59.5%
30-39	158	128	81.0%	615	9.4%	10.2%	17.2%	63.3%
40-49	180	142	78.9%	599	7.7%	10.6%	16.9%	64.8%
50-59	269	213	79.2%	597	11.7%	13.1%	15.5%	59.6%
60+	97	***	***	***	***	***	***	***
Total	817	648	79.3%	602	9.7%	12.8%	15.6%	61.9%

^{***} Data withheld due to low population counts and/or case counts

<u>Table 10 – Viral Load Test Results during 2017 for Adult/Adolescent HIV Cases Alive on December 31, 2017, by Age on December 31, 2017, Reported through June 30, 2018</u>

		Adult/Adolescent Total Living HIV Cases										
Age on — December 31,			Recent Viral Load Test Result									
2017	No.	No. with Test	% with Test	% Suppressed	Median Unsuppressed							
13-19	4	***	***	***	***							
20-29	109	85	78.0%	70.6%	10,297							
30-39	158	128	81.0%	79.7%	18,406							
40-49	180	142	78.9%	85.9%	3,595							
50-59	269	211	78.4%	88.6%	4,406							
60+	97	***	***	***	***							
Total	817	650	79.6%	84.3%	7,835							

^{***} Data withheld due to low population counts and/or case counts

Section VI - Adult/Adolescent Cases by Demographics

<u>Table 11 – Adult/Adolescent HIV Diagnoses during 2017, Linked to Care, Late Diagnosis, and First CD4 Test Result by Sex at Birth, Gender, Race/Ethnicity, and Country of Birth, Reported through June 30, 2018</u>

				Adult/Ad	olescent R	eported F	IIV Diagnoses	3	
Demographic Characteristics	Population Age 13+	No.	% of	Rate	Linked		Late HIV Diagnoses		04 Test sult
		140.	Total	Nate	%	%	%	%	Median
Sex at Birth					1 mo.	3 mo.			Count
Male	147,278	28	80.0%	19.0	89.3%	92.9%	***	96.4%	284

Female	155,246	7	20.0%	4.5	100.0%	100.0%	***	100.0%	169
Gender									
Male		27	77.1%		***	***	***	***	***
Female		7	20.0%		***	***	***	***	***
Transgender Female		1	2.9%		***	***	***	***	***
Transgender Male		0	0.0%						
Another Gender Identity		0	0.0%						
Race/Ethnicity									
Hispanic	14,117	1	2.9%	7.1	***	***	***	***	***
Non-Hispanic	288,407	34	97.1%	11.8	91.2%	94.1%	35.3%	97.1%	284
American	,								
Indian/Alaska Native, only	1,417	0	0.0%	0.0					
Asian, only	8,605	0	0.0%	0.0					
Black, only	84,189	23	65.7%	27.3	87.0%	91.3%	34.8%	95.7%	267
Native Hawaiian/Other Pacific Islander, only	244	0	0.0%	0.0					
White, only	186,681	10	28.6%	5.4	100.0%	100.0%	***	100.0%	310
Multiracial/Other	7,271	1	2.9%	13.8	***	***	***	***	***
Total	302,524	35	100.0%	11.6	91.4%	94.3%	37.1%	97.1%	277
Country of Birth									
United States	16,045	32	91.4%	199.4	90.6%	93.8%	37.5%	96.9%	284
Foreign-Born	277,116	2	5.7%	0.7	***	***	***	***	***
Africa		1	2.9%		***	***	***	***	***
Asia		1	2.9%		***	***	***	***	***
Caribbean		0	0.0%						
Central America		0	0.0%						
Other		0	0.0%						
Unknown		1	2.9%		***	***	***	***	***
Total	293,162	35	100.0%	11.9	91.4%	94.3%	37.1%	97.1%	277

Note. Population data by sex at birth, age, and race/ethnicity are from the 2017 U.S. Census population estimates. Population data by gender are unavailable. Population data by country of birth are from the 2016 American Community Survey.

^{***} Data withheld due to low population and/or case counts

<u>Table 12 – Adult/Adolescent Living HIV Cases Alive on December 31, 2017, by Sex at Birth, Gender, Race/Ethnicity, and Country of Birth, Reported through June 30, 2018</u>

		Ad	ult/Adolesc	ent Total Livi	ng HIV Case	es
Demographic Characteristics	Population Age 13+	No.	% of Total	% Living with AIDS	177.1 274.6 0.0 58.1 688.9 0.0 91.6 495.1 270.1	Ratio (1 in X)
Sex at Birth						
Male	147,278	533	65.2%	52.5%	361.9	276
Female	155,246	284	34.8%	54.9%	182.9	546
Gender						
Male		526	64.4%	52.9%		
Female		284	34.8%	54.9%		
Transgender Female		7	0.9%	28.6%		
Transgender Male		0	0.0%	0.0%		
Another Gender Identity		0	0.0%	0.0%		
Race/Ethnicity						
Hispanic	14,117	25	3.1%	64.0%	177.1	564
Non-Hispanic	288,407	792	96.9%	53.0%	274.6	364
American Indian/Alaska Native, only	1,417	0	0.0%	0.0%	0.0	
Asian, only	8,605	5	0.6%	60.0%	58.1	1,720
Black, only	84,189	580	71.0%	52.9%	688.9	145
Native Hawaiian/Other Pacific Islander, only	244	0	0.0%	0.0%	0.0	
White, only	186,681	171	20.9%	50.9%	91.6	1,091
Multiracial/Other	7,271	36	4.4%	63.9%	495.1	201
Total	302,524	817	100.0%	53.4%	270.1	370
Country of Birth						
United States	16,045	768	94.0%	54.4%	4,786.4	20
Foreign-Born	277,116	26	3.2%	50.0%	9.4	10,658
Africa		16	2.0%	50.0%		
Asia		4	0.5%	0.0%		
Caribbean		0	0.0%	0.0%		
Central America		3	0.4%	100.0%		
Other		3	0.4%	66.7%		
Unknown		23	2.8%	21.7%		
Total	293,162	817	100.0%	53.4%	278.7	358

Note. Population data by sex at birth, age, and race/ethnicity are from the 2017 U.S. Census population estimates. Population data by gender are unavailable. Population data by country of birth are from the 2016 American Community Survey.

^{***} Data withheld due to low population and/or case counts

<u>Table 13 – CD4 Test Results during 2017 for Adult/Adolescent HIV Cases Alive on December 31, 2017, by Sex at Birth, Gender, Race/Ethnicity and Country of Birth, Reported through June 30, 2018</u>

_			Adult/Ad	olescent To	tal Living I	HIV Cases		
Demographic Characteristics				Recent	CD4 Test	Result		
	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+
Sex at Birth								
Male	533	413	77.5%	575	10.9%	14.8%	16.0%	58.4%
Female	284	235	82.7%	678	7.7%	9.4%	14.9%	68.1%
Gender								
Male	526	***	***	***	***	***	***	***
Female	284	***	***	***	***	***	***	***
Transgender Female	7	***	***	***	***	***	***	***
Transgender Male	0							
Another Gender Identity	0							
Race/Ethnicity								
Hispanic	25	20	80.0%	583	15.0%	10.0%	20.0%	55.0%
Non-Hispanic	792	628	79.3%	606	9.6%	12.9%	15.4%	62.1%
American Indian/Alaska Native, only	0							
Asian, only	5	5	100.0%	598	40.0%	0.0%	0.0%	60.0%
Black, only	580	449	77.4%	600	10.0%	13.4%	14.9%	61.7%
Native Hawaiian/Other Pacific Islander, only	0							
White, only	171	140	81.9%	638	7.9%	12.9%	17.1%	62.1%
Multiracial/Other	36	34	94.4%	604	5.9%	8.8%	17.6%	67.6%
Country of Birth								
United States	768	616	80.2%	602	9.7%	13.0%	15.6%	61.7%
Foreign-Born	26	21	80.8%	576	9.5%	9.5%	19.0%	61.9%
Africa	16	13	81.3%	493	7.7%	15.4%	30.8%	46.2%
Asia	4	***	***	***	***	***	***	***
Caribbean	0							
Central America	3	***	***	***	***	***	***	***
Other	3	***	***	***	***	***	***	***
Unknown	23	11	47.8%	687	9.1%	9.1%	9.1%	72.7%
Total	817	648	79.3%	602	9.7%	12.8%	15.6%	61.9%

^{***} Data withheld due to low population and/or case counts

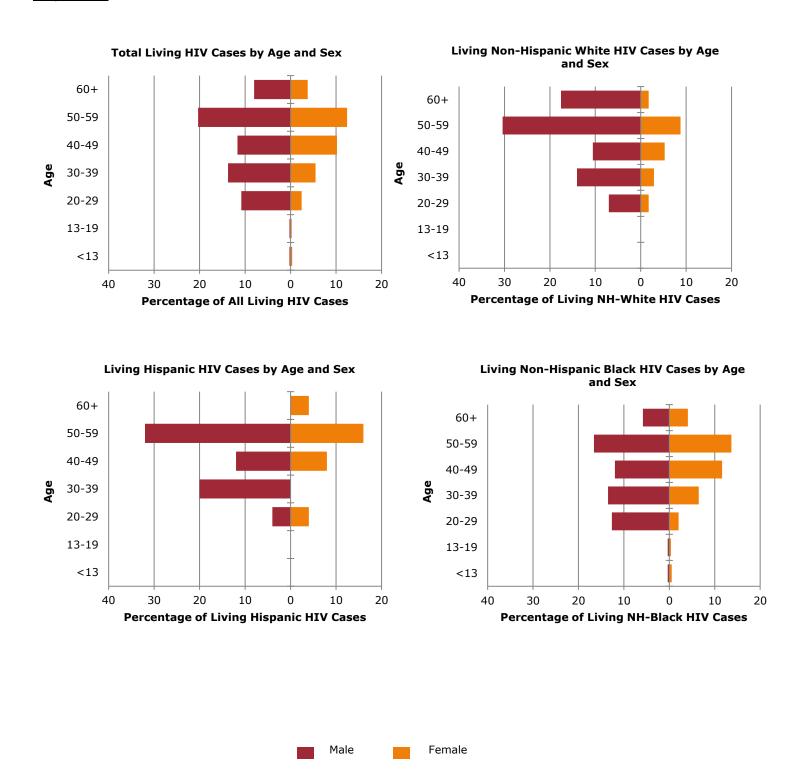
<u>Table 14 – Viral Load Test Results during 2017 for Adult/Adolescent HIV Cases Alive on December 31, 2017, by Sex at Birth, Gender, Race/Ethnicity and Country of Birth, Reported through June 30, 2018</u>

	Adult/Adolescent Total Living HIV Cases							
Demographic Characteristics			Recent Viral L	oad Test Result				
	No.	No. with Test	% with Test	% Suppressed	Median Unsuppressed			
Sex at Birth					••			
Male	533	410	76.9%	84.1%	6,280			
Female	284	240	84.5%	84.6%	9,520			
Gender								
Male	526	404	76.8%	84.4%	6,280			
Female	284	240	84.5%	84.6%	9,520			
Transgender Female	7	6	85.7%	66.7%	93,225			
Transgender Male	0							
Another Gender Identity	0							
Race/Ethnicity								
Hispanic	25	20	80.0%	75.0%	34,600			
Non-Hispanic	792	630	79.5%	84.6%	6,280			
American Indian/Alaska Native, only	0							
Asian, only	5	5	100.0%	80.0%	2,440			
Black, only	580	452	77.9%	83.4%	5,720			
Native Hawaiian/Other Pacific Islander, only	0							
White, only	171	140	81.9%	89.3%	22,700			
Multiracial/Other	36	33	91.7%	81.8%	7,315			
Country of Birth								
United States	768	617	80.3%	84.4%	9,015			
Foreign-Born	26	21	80.8%	85.7%	2,391			
Africa	16	13	81.3%	92.3%	2,391			
Asia	4	***	***	***	***			
Caribbean	0							
Central America	3	***	***	***	***			
Other	3	***	***	***	***			
Unknown	23	12	52.2%	75.0%	256			
Total	817	650	79.6%	84.3%	7,835			

^{***} Data withheld due to low population and/or case counts

Section VII - HIV Cases by Expanded Demographics

<u>Figure 9 – Population Pyramids of Total Living HIV Cases by Current Age, Sex at Birth, and Race/Ethnicity, Alive on December 31, 2017 and Reported through June 30, 2018</u>



<u>Table 15 – Total Living Male HIV Cases by Current Age and Race/Ethnicity, Alive on December 31, 2017 and Reported through June 30, 2018</u>

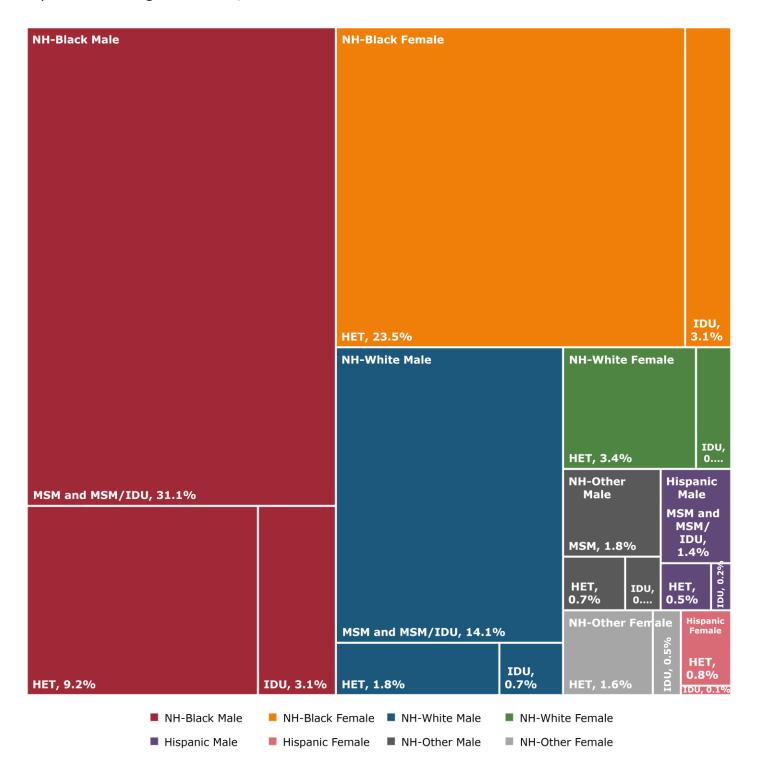
Total Living Male HIV Cases						
Age on			Race/E	thnicity		Total Males
December 31, 2017		Hispanic	Non-Hispanic Black, only	Non-Hispanic White, only	Non-Hispanic Other Race	by Age Group
	Population	2,419	8,984	16,741	3,209	31,353
<13 (Pediatric)	Cases	0	2	0	0	2
<13 (Pediatric)	Rate	0.0	22.3	0.0	0.0	6.4
	Ratio (1 in X)		4,492			15,676
	Population	1,096	5,525	9,736	1,675	18,032
12.10	Cases	0	2	0	0	2
13-19	Rate	0.0	36.2	0.0	0.0	11.1
	Ratio (1 in X)		2,762			9,016
	Population	1,581	6,958	13,687	1,557	23,783
20.20	Cases	1	74	12	2	89
20-29	Rate	63.3	1,063.5	87.7	128.5	374.2
	Ratio (1 in X)	1,581	94	1,140	778	267
	Population	1,800	6,050	13,737	1,197	22,784
20.20	Cases	5	79	24	5	113
30-39	Rate	277.8	1,305.8	174.7	417.7	496.0
	Ratio (1 in X)	360	76	572	239	201
	Population	1,329	7,099	13,633	1,172	23,233
40.40	Cases	3	70	18	5	96
40-49	Rate	225.7	986.1	132.0	426.6	413.2
	Ratio (1 in X)	443	101	757	234	242
	Population	810	7,457	18,786	***	28,095
F0 F0	Cases	***	97	52	***	167
50-59	Rate	***	1,300.8	276.8	***	594.4
	Ratio (1 in X)	***	76	361	***	168
	Population	550	6,328	23,312	1,161	31,351
60.	Cases	***	34	30	***	66
60+	Rate	***	537.3	128.7	***	210.5
	Ratio (1 in X)	***	186	777	***	475
	Population	9,585	48,401	109,632	11,013	178,631
Total Males by	Cases	17	358	136	24	535
Race/Ethnicity	Rate	177.4	739.7	124.1	217.9	299.5
	Ratio (1 in X)	563	135	806	458	333

<u>Table 16 – Total Living Female HIV Cases by Current Age and Race/Ethnicity, Alive on December 31, 2017 and Reported through June 30, 2018</u>

Total Living Female HIV Cases						
Age on			Race/E	thnicity		Total Females
December 31, 2017	_	Hispanic	Non-Hispanic Black, only	Non-Hispanic White, only	Non-Hispanic Other Race	by Age Group
_	Population	2,322	8,653	15,969	3,048	29,992
<13 (Pediatric) —	Cases	0	3	0	0	3
<13 (Pediatric) —	Rate	0.0	34.7	0.0	0.0	10.0
_	Ratio (1 in X)		2,884			9,997
	Population	1,101	5,412	9,412	1,554	17,479
12.10	Cases	0	2	0	0	2
13-19 —	Rate	0.0	37.0	0.0	0.0	11.4
_	Ratio (1 in X)		2,705			8,739
	Population	1,433	6,978	12,684	1,636	22,731
20.20	Cases	1	12	3	4	20
20-29 —	Rate	69.8	172.0	23.7	244.5	88.0
_	Ratio (1 in X)	1,433	581	4,228	409	1,136
	Population	1,615	7,056	13,416	1,636	23,723
_	Cases	0	38	5	2	45
30-39 —	Rate	0.0	538.5	37.3	122.2	189.7
_	Ratio (1 in X)		185	2,683	818	527
	Population	1,261	8,595	14,162	1,766	25,784
-	Cases	2	68	9	5	84
40-49 —	Rate	158.6	791.2	63.6	283.1	325.8
_	Ratio (1 in X)	630	126	1,573	353	306
	Population	888	8,321	18,367	1,517	29,093
	Cases	***	80	15	***	102
50-59 —	Rate	***	961.4	81.7	***	350.6
_	Ratio (1 in X)	***	104	1,224	***	285
	Population	653	8,410	25,749	1,624	36,436
_	Cases	***	24	3	***	31
60+ —	Rate	***	285.4	11.7	***	85.1
_	Ratio (1 in X)	***	350	8,583	***	1,175
	Population	9,273	53,425	109,759	12,781	185,238
Total Females by	Cases	8	227	35	17	287
Race/Ethnicity	Rate	86.3	424.9	31.9	133.0	154.9
_	Ratio (1 in X)	1,159	235	3,135	751	645
		·		· · · · · · · · · · · · · · · · · · ·		

Section VIII - HIV Exposure Category

<u>Figure 10 – Proportion of Adult/Adolescent Total Living HIV Cases, by Estimated Exposure Category, Race/Ethnicity, and Sex at Birth, Alive on December 31, 2017, Reported through June 30, 2018</u>



Note. Other exposure category and perinatal transmission not shown (1 percent). Multiple imputation was used to estimate and adjust for missing transmission category.

<u>Table 17 – Adult/Adolescent HIV Diagnoses during 2017, Linked to Care, Late Diagnosis, and First CD4 Test Result, by Estimated or Reported Exposure Category and Sex at Birth, Reported through June 30, 2018</u>

		es					
Estimated or Reported Exposure Category	Na	% of	Linked t	o Care	Late HIV Diagnoses	First CD4 Test Result	
Category	No.	Total	% 1 mo.	% 3 mo.	%	%	Median Count
Male-to-male Sexual Contact (MSM)	23	65.7%	91.3%	91.3%	25.7%	95.7%	336
Injection Drug Use (IDU)	3	9.1%	***	***	***	***	***
Male-to-male Sexual Contact and Injection Drug Use (MSM/IDU)	0	0.6%					
Heterosexual Contact (HET)	9	24.6%	***	***	***	***	***
Perinatal Transmission	0	0.0%					
Other Exposures	0	0.0%					
No Estimated or Reported Exposure	0	0.0%					
Total	35	100.0%	91.4%	94.3%	37.1%	97.1%	277
Male Estimated or Reported Exposure Category							
Male-to-male Sexual Contact (MSM)	23	82.1%	91.3%	91.3%	25.7%	95.7%	336
Injection Drug Use (IDU)	3	9.6%	***	***	***	***	***
Male-to-male Sexual Contact and Injection Drug Use (MSM/IDU)	0	0.0%					
Heterosexual Contact (HET)	2	7.5%	***	***	***	***	***
Perinatal Transmission	0	0.0%					
Other Exposures	0	0.0%					
No Estimated or Reported Exposure	0	0.0%					
Total	28	100.0%	89.3%	92.9%	32.1%	96.4%	284
Female Estimated or Reported Exposure Category							
Injection Drug Use (IDU)	1	7.1%	***	***	***	***	***
Heterosexual Contact (HET)	7	92.9%	***	***	***	***	***
Perinatal Transmission	0	0.0%					
Other Exposures	0	0.0%					
No Estimated or Reported Exposure	0	0.0%					
Total	7	100.0%	100.0%	100.0%	57.1%	100.0%	169

Note. Data for 2017 are preliminary because they are based on a 6-month reporting delay and should not be used to assess trends. Data have been statistically adjusted to account for missing transmission category, therefore, values may not sum to column total. Median count is weighted based on statistical adjustment. For exposure category by gender, please see the Maryland HIV Epidemiological Profile Transgender Persons Supplement.

^{***} Data withheld due to low population and/or case counts

<u>Table 18 – Adult/Adolescent Living HIV Cases Alive on December 31, 2017, by</u>
<u>Estimated or Reported Exposure Category and Sex at Birth, Reported through June</u>
30, 2018

	Adult/Adolescent Total Living HIV Cases				
Estimated or Reported Exposure Category	No.	% of Total	% Living with AIDS		
Male-to-male Sexual Contact (MSM)	375	45.8%	45.5%		
Injection Drug Use (IDU)	73	9.0%	62.1%		
Male-to-male Sexual Contact and Injection Drug Use (MSM/IDU)	21	2.6%	62.6%		
Heterosexual Contact (HET)	340	41.6%	59.0%		
Perinatal Transmission	7	0.9%	71.4%		
Other Exposures	1	0.1%	100.0%		
No Estimated or Reported Exposure	0	0.0%	0.0%		
Total	817	100.0%	53.4%		
Male Estimated or Reported Exposure Category					
Male-to-male Sexual Contact (MSM)	375	70.3%	45.5%		
Injection Drug Users (IDU)	36	6.8%	70.1%		
Male-to-male Sexual Contact and Injection Drug Use (MSM/IDU)	21	4.0%	62.6%		
Heterosexual Contact (HET)	100	18.8%	70.8%		
Perinatal Transmission	1	0.2%	0.0%		
Other Exposures	0	0.0%	0.0%		
No Estimated or Reported Exposure	0	0.0%	0.0%		
Total	533	100.0%	52.5%		
Female Estimated or Reported Exposure Category					
Injection Drug Use (IDU)	37	13.1%	54.4%		
Heterosexual Contact (HET)	240	84.4%	54.1%		
Perinatal Transmission	6	2.1%	83.3%		
Other Exposures	1	0.4%	100.0%		
No Estimated or Reported Exposure	0	0.0%	0.0%		
Total	284	100.0%	54.9%		

Note. Data have been statistically adjusted to account for missing transmission category, therefore, values may not sum to column total. For exposure category by gender, please see the Maryland HIV Epidemiological Profile Transgender Persons Supplement.

<u>Table 19 – Adult/Adolescent Total Living HIV Cases by Estimated or Reported</u>
<u>Exposure Category, Race/Ethnicity, and Sex at Birth, Alive on December 31, 2017</u>
and Reported through June 30, 2018

_	Adult/Adolescent Total Living HIV Cases								
Estimated or Reported Exposure –	Race/Ethnicity								
Category	Hi	spanic	Non-Hispai	nic, Black, only	Non-Hispanic, White, only				
	No.	% of Total	No.	% of Total	No.	% of Total			
Male-to-male Sexual Contact (MSM)	9	34.4%	243	41.9%	108	63.3%			
Injection Drug Use (IDU)	3	10.4%	51	8.7%	13	7.8%			
Male-to-male Sexual Contact and Injection Drug Use (MSM/IDU)	3	10.0%	11	1.9%	7	4.3%			
Heterosexual Contact (HET)	11	45.2%	267	46.1%	42	24.6%			
Perinatal Transmission	0	0.0%	7	1.2%	0	0.0%			
Other Exposures	0	0.0%	1	0.2%	0	0.0%			
No Estimated or Reported Exposure	0	0.0%	0	0.0%	0	0.0%			
Total	25	100.0%	580	100.0%	171	100.0%			
Exposure Category Male-to-male Sexual Contact (MSM) Injection Drug Use (IDU)	9	50.6%	243 26	68.2% 7.2%	108	79.6% 4.4%			
<u> </u>						79.6% 4.4%			
Male-to-male Sexual Contact and Injection Drug Use (MSM/IDU)	3	14.7%	11	3.1%	7	5.4%			
Heterosexual Contact (HET)	4	25.9%	75	21.2%	14	10.6%			
Perinatal Transmission	0	0.0%	1	0.3%	0	0.0%			
Other Exposures	0	0.0%	0	0.0%	0	0.0%			
No Estimated or Reported Exposure	0	0.0%	0	0.0%	0	0.0%			
Total	17	100.0%	356	100.0%	136	100.0%			
Female Estimated or Reported Exposure Category									
Injection Drug Use (IDU)	1	13.8%	25	11.2%	7	20.9%			
Heterosexual Contact (HET)	7	86.3%	192	85.7%	28	79.1%			
Perinatal Transmission	0	0.0%	6	2.7%	0	0.0%			
Other Exposures	0	0.0%	1	0.4%	0	0.0%			
No Estimated or Reported Exposure	0	0.0%	0	0.0%	0	0.0%			
Total	8	100.0%	224	100.0%	35	100.0%			

Note. Data have been statistically adjusted to account for missing transmission category, therefore, values may not sum to column total. For exposure category by gender, please see the Maryland HIV Epidemiological Profile Transgender Persons Supplement.

<u>Table 20 – CD4 Test Results during 2017 for Adult/Adolescent HIV Cases Alive on December 31, 2017, by Estimated or Reported Exposure Category, Reported through June 30, 2018</u>

			Adult/Add	olescent Tot	al Living	HIV Cases		
Estimated or Reported Exposure	Recent CD4 Test Results							
Category	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+
Male-to-male Sexual Contact (MSM)	375	286	76.3%	590	10.3%	15.1%	14.8%	59.8%
Injection Drug Use (IDU)	73	54	73.6%	569	10.6%	15.2%	15.4%	58.9%
Male-to-male Sexual Contact and Injection Drug Use (MSM/IDU)	21	17	78.2%	614	8.5%	4.2%	24.8%	62.4%
Heterosexual Contact (HET)	340	285	83.8%	640	8.9%	10.2%	16.3%	64.6%
Perinatal Transmission	7	***	***	***	***	***	***	***
Other Exposures	1	***	***	***	***	***	***	***
No Estimated or Reported Exposure	0							
Total	817	648	79.3%	602	9.7%	12.8%	15.6%	61.9%

Note. Data have been statistically adjusted to account for missing transmission category, therefore, values may not sum to column total. Median count is weighted based on statistical adjustment.

<u>Table 21 – Viral Load Test Results during 2017 for Adult/Adolescent HIV Cases Alive on December 31, 2017, by Estimated or Reported Exposure Category, Reported through June 30, 2018</u>

	Adult/Adolescent Total Living HIV Cases						
Estimated or Reported Exposure			Recent Viral L	oad Test Results			
Category	No.	No. with Test	% with Test	% Suppressed	Median Unsuppressed		
Male-to-male Sexual Contact (MSM)	375	286	76.3%	83.3%	15,616		
Injection Drug Use (IDU)	73	54	73.7%	92.4%	4,070		
Male-to-male Sexual Contact and Injection Drug Use (MSM/IDU)	21	16	76.8%	92.0%	460		
Heterosexual Contact (HET)	340	286	84.1%	84.0%	5,912		
Perinatal Transmission	7	***	***	***	***		
Other Exposures	1	***	***	***	***		
No Estimated or Reported Exposure	0						
Total	817	650	79.6%	84.3%	7,835		

Note. Data have been statistically adjusted to account for missing transmission category, therefore, values may not sum to column total. Median unsuppressed is weighted based on statistical adjustment.

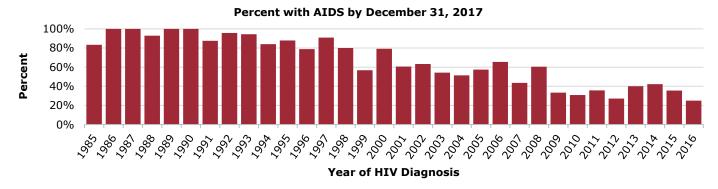
^{***} Data withheld due to low population and/or case counts

^{***} Data withheld due to low population and/or case counts

Section IX - Disease Progression and Mortality

<u>Figure 11 – Trends in Disease Progression by Year of HIV Diagnosis, 1985-2016, Reported through June 30, 2018</u>

Number of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with or without an AIDS Diagnosis by December 31, 2016 (Adult/Adolescent Reported HIV Diagnoses), Number of Adult/Adolescent Reported HIV Cases with an AIDS Diagnosis by December 31, 2017 (Reported AIDS Diagnoses), Percent by Year of HIV Diagnosis of Adult/Adolescent Reported HIV Diagnoses with a Reported AIDS Diagnosis by December 31, 2017, the Average Years from HIV Diagnosis to AIDS Diagnosis for Cases with an AIDS Diagnosis, and the Percent by Year of HIV Diagnosis of Reported Adult/Adolescent HIV Diagnoses with a Reported AIDS Diagnosis at 1 Year, 2 Years, 5 Years, and 10 Years after HIV Diagnosis, by Year of HIV Diagnosis from 1985 through 2016, as Reported by Name through June 30, 2018

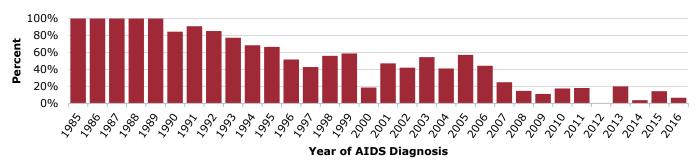


_			Adult/Ado	lescent Reported H	IIV Diagno	ses		
Year of HIV		Re	ported AIDS Diag	jnoses	Percei		S by Years A gnosis	fter HIV
Diagnosis	No.	No.	% with AIDS	Mean Years from HIV to AIDS	1 Year	2 Years	5 Years	10 Years
<1985	2	2	100.0%	10.0	50.0%	50.0%	50.0%	50.0%
1985	6	5	83.3%	9.8	16.7%	16.7%	33.3%	50.0%
1986	13	13	100.0%	7.8	38.5%	38.5%	46.2%	61.5%
1987	16	16	100.0%	6.0	37.5%	37.5%	56.3%	87.5%
1988	14	13	92.9%	2.7	57.1%	57.1%	71.4%	92.9%
1989	22	22	100.0%	2.6	59.1%	59.1%	81.8%	90.9%
1990	32	32	100.0%	4.7	37.5%	46.9%	65.6%	87.5%
1991	24	21	87.5%	3.4	50.0%	54.2%	62.5%	79.2%
1992	24	23	95.8%	1.6	70.8%	70.8%	87.5%	91.7%
1993	18	17	94.4%	1.5	77.8%	83.3%	88.9%	88.9%
1994	25	21	84.0%	2.4	60.0%	68.0%	68.0%	76.0%
1995	33	29	87.9%	3.5	42.4%	45.5%	63.6%	78.8%
1996	33	26	78.8%	2.5	48.5%	57.6%	66.7%	72.7%
1997	22	20	90.9%	2.9	59.1%	63.6%	68.2%	81.8%
1998	25	20	80.0%	1.2	64.0%	72.0%	72.0%	80.0%
1999	30	17	56.7%	2.2	40.0%	43.3%	46.7%	50.0%
2000	24	19	79.2%	4.9	29.2%	33.3%	58.3%	66.7%
2001	28	17	60.7%	0.4	57.1%	57.1%	60.7%	60.7%
2002	30	19	63.3%	2.0	43.3%	46.7%	56.7%	63.3%
2003	35	19	54.3%	1.1	42.9%	42.9%	48.6%	54.3%
2004	35	18	51.4%	1.4	42.9%	45.7%	45.7%	48.6%
2005	47	27	57.4%	2.1	40.4%	42.6%	46.8%	51.1%
2006	29	19	65.5%	1.0	55.2%	55.2%	58.6%	65.5%
2007	46	20	43.5%	1.8	28.3%	30.4%	39.1%	41.3%
2008	38	23	60.5%	0.9	50.0%	52.6%	55.3%	
2009	39	13	33.3%	1.7	20.5%	23.1%	28.2%	
2010	39	12	30.8%	0.8	23.1%	25.6%	30.8%	
2011	28	10	35.7%	1.0	25.0%	32.1%	32.1%	
2012	48	13	27.1%	0.6	22.9%	27.1%	27.1%	
2013	40	16	40.0%	1.3	27.5%	27.5%		
2014	52	22	42.3%	0.6	36.5%	36.5%		
2015	31	11	35.5%	0.8	25.8%	32.3%		
2016	36	9	25.0%	0.4	22.2%			
Total	964	584	60.6%	2.4	40.4%	43.5%	50.6%	56.5%

<u>Figure 12 – Trends in Survival Times by Year of AIDS Diagnosis, 1985-2016, Reported through June 30, 2018</u>

Number of Adult/Adolescent Reported HIV Cases, Age 13+ at HIV Diagnosis, with an AIDS Diagnosis by December 31, 2016 (Adult/Adolescent Reported AIDS Diagnoses), Number of Adult/Adolescent Reported AIDS Diagnosis Reported to Have Died of Any Cause by December 31, 2017 (Reported AIDS Deaths), Percent by Year of AIDS Diagnosis of Adult/Adolescent Reported AIDS Diagnoses with a Reported AIDS Death (Percent Dead) by December 31, 2017, the Average Years from AIDS Diagnosis to Death for Cases that have Died, and the Percent by Year of AIDS Diagnosis of Adult/Adolescent Reported AIDS Diagnoses Not Reported to Have Died (Percent Alive) at 1 Year, 2 Years, 5 Years, and 10 Years after AIDS Diagnosis, by Year of AIDS Diagnosis from 1985 through 2016, as Reported by Name through June 30, 2018





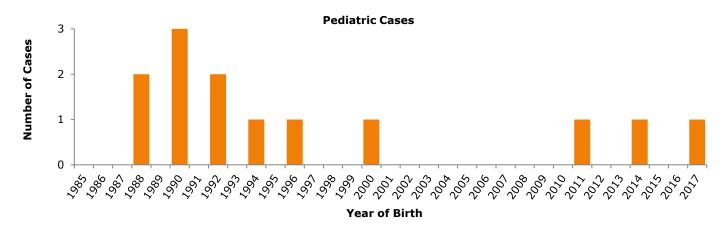
Adult/Adolescent Reported AIDS Diagnoses Reported AIDS Deaths Percent Alive by Years After AIDS Diagnosis Year of Mean **AIDS** No. Years Diagnosis No. % Dead 1 Year 5 Years 10 Years 2 Years from AIDS to Death <1985 1 1 100.0% 0.0 0.0% 0.0% 0.0% 0.0% 1985 1 1 100.0% 2.9 100.0% 100.0% 0.0% 0.0% 1986 5 5 100.0% 40.0% 0.0% 0.0% 1.1 20.0% 16.7% 16.7% 16.7% 1987 6 6 100.0% 2.5 50.0% 0.0% 8 8 12.5% 1988 100.0% 2.3 62.5% 50.0% 1989 14 14 100.0% 2.1 85.7% 50.0% 0.0% 0.0% 1990 13 11 84.6% 3.6 76.9% 61.5% 38.5% 23.1% 9.1% 1991 11 10 90.9% 2.3 81.8% 54.5% 18.2% 3.0 1992 27 23 85.2% 85.2% 59.3% 22.2% 22.2% 22 77.3% 2.9 72.7% 31.8% 27.3% 1993 17 50.0% 3.2 1994 19 13 89.5% 47.4% 42.1% 68.4% 52.6% 1995 21 14 66.7% 3.3 76.2% 57.1% 52.4% 42.9% 86.2% 58.6% 1996 29 15 51.7% 4.9 79.3% 72.4% 1997 21 9 42.9% 5.3 81.0% 81.0% 81.0% 61.9% 1998 25 14 56.0% 6.8 84.0% 84.0% 80.0% 60.0% 1999 17 10 58.8% 6.9 88.2% 88.2% 70.6% 58.8% 2000 16 3 18.8% 7.1 100.0% 100.0% 87.5% 87.5% 8 2001 17 47.1% 5.1 88.2% 82.4% 70.6% 64.7% 19 8 63.2% 57.9% 2002 42.1% 2.4 84.2% 78.9% 22 12 4.8 81.8% 77.3% 68.2% 63.6% 2003 54.5% 41.2% 76.5% 2004 7 4.2 76.5% 64.7% 17 82.4% 76.2% 2005 21 12 57.1% 4.3 81.0% 66.7% 42.9% 2006 27 12 44.4% 2.5 81.5% 81.5% 63.0% 55.6% 75.0% 2007 20 2.4 25.0% 85.0% 85.0% 80.0% 27 2008 4 14.8% 1.8 92.6% 92.6% 85.2% 2 1.7 2009 18 11.1% 94.4% 94.4% 88.9% 3 17.6% 0.7 82.4% 2010 17 88.2% 82.4% 2 90.9% --2011 11 18.2% 2.1 90.9% 81.8% 20 0 2012 0.0% 100.0% 100.0% 100.0% 2013 20 4 20.0% 1.0 85.0% 80.0% 2014 26 3.8% 0.3 96.2% 96.2% 2015 14 2 14.3% 1.8 92.9% 92.9% --2016* 15 1 6.7% 0.1 93.3% --Total 257 45.3% 77.1% 66.0% 59.6% 567 85.2%

^{*2016} AIDS deaths are preliminary

Section X - Pediatric Cases

<u>Figure 13 – Trends in Pediatric HIV Cases, 1985-2017, Reported through June 30, 2018</u>

Number of Pediatric Reported HIV Cases, Age <13 at HIV Diagnosis, with or without an AIDS Diagnosis (Pediatric Reported HIV Diagnoses) by Year of Birth, by Year of HIV Diagnosis, by Year of AIDS Diagnosis, and by Year of Death Due to Any Cause, and Number of Pediatric Reported HIV Cases, Age <13 at HIV Diagnosis, with or without an AIDS Diagnosis and Not Reported to have Died as of December 31st of Each Year (Pediatric Total Living HIV Cases) from 1985 through 2017, as Reported by Name through June 30, 2018



_		Pediatric Reporte	Pediatric Total Living HIV Cases		
Year	No. by Year of	No. by Year of	No. by Year of	No. by Year of	No. Alive on December 31st of
	Birth	HIV Diagnosis	AIDS Diagnosis	Death	Each Year
<1985	1	0	0	0	
1985	0	0	0	0	0
1986	0	0	0	0	0
1987	0	0	0	0	0
1988	2	1	1	0	0
1989	0	0	0	0	0
1990	3	2	0	0	2
1991	0	0	1	0	1
1992	2	1	0	0	2
1993	0	0	0	0	2
1994	1	3	3	0	4
1995	0	0	0	1	3
1996	1	1	1	1	4
1997	0	0	0	0	4
1998	0	0	1	0	4
1999	0	0	0	1	3
2000	1	2	0	0	5
2001	0	0	0	0	6_
2002	0	0	0	0	6_
2003	0	0	0	0	6_
2004	0	0	0	0	6_
2005	0	0	0	0	6_
2006	0	0	0	0	6_
2007	0	1	0	0	7
2008	0	0	0	0	7
2009	0	0	0	0	7
2010	0	0	0	1	6
2011	1	1	1	0	7
2012	0	0	0	0	7
2013	0	0	0	1	6
2014	1	1	1	0	7
2015	0	0	0	0	7
2016	0	0	0	0	7
2017	1	1	0	0	8
Total	14	14	9	5	 _

<u>Table 22 – Current Pediatric HIV Total Living HIV Cases, Alive on December 31, 2017, by Jurisdiction of Current Residence, Reported through June 30, 2018</u>

Jurisdiction of Current Residence	Current Pediatric Total Living HIV Cases			
	No.		% of Total	
Calvert		0	0.0%	
Charles		3	100.0%	
Saint Mary's		0	0.0%	
Total		3	100.0%	

<u>Table 23 – Current Pediatric HIV Total Living HIV Cases, Alive on December 31, 2017, by Sex at Birth and Race/Ethnicity, Reported through June 30, 2018</u>

Down a way while Chayra stoyictic	Current Pediatric Total Living HIV Cases				
Demographic Characteristic	No.	% of Total			
Sex at Birth					
Male	1	33.3%			
Female	2	66.7%			
Race/Ethnicity					
Hispanic	0	0.0%			
Non-Hispanic	3	100.0%			
American Indian/ Alaska Native, only	0	0.0%			
Asian, only	0	0.0%			
Black, only	3	100.0%			
Native Hawaiian/Other Pacific Islander, only	0	0.0%			
White, only	0	0.0%			
Multiracial/Other	0	0.0%			
Total	3	100.0%			

Glossary of Terms

Adult/Adolescent Living HIV Cases with AIDS: Reported HIV diagnoses, age 13 years or older as of December 31st of the specified year, with an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Adult/Adolescent Living HIV Cases without AIDS: Reported HIV diagnoses, age 13 years or older as of December 31st of the specified year, without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Adult/Adolescent Reported AIDS Diagnoses: Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial AIDS diagnosis during the specified year.

Adult/Adolescent Reported HIV Diagnoses: Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

Adult/Adolescent Total Living HIV Cases: Reported HIV diagnoses, age 13 years or older as of December 31st of the specified year, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Age at AIDS Diagnosis: Age group at time of initial AIDS diagnosis.

Age at HIV Diagnosis: Age group at time of initial HIV diagnosis.

Age on [date]: Age group of living cases on the specified date.

AIDS Deaths: Reported HIV diagnoses with an AIDS diagnosis that have died due to any cause.

CD4 Result Distribution (<200, 200-349, 350-499, 500+): Percent of cases with a CD4 test distributed by their CD4 count results (cells per microliter).

CD4 With Test: Number and percent of adult/adolescent total living HIV cases with a recent CD4 test result.

Corrections: Residence in a state or federal prison. Does not include local jails and detention centers.

Current Residence: Jurisdiction of residence from the most recent report since January 1, 2009.

First CD4 Test Result Median Count: Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.

First CD4 Test Result Percent: Percent of adult/adolescent reported HIV diagnoses with the first CD4 test result reported within 12 months following the initial HIV diagnosis.

Gender Expression: people's outward presentation of their gender which may or may not conform to socially defined behaviors and characteristics typically associated with being either masculine or feminine.

Gender Identity: refers to one's internal understanding of one's own gender, or the gender with which a person identifies.

Jurisdiction of Current Residence: Jurisdiction of residence from the most recent report since January 1, 2009.

Jurisdiction of Residence: Jurisdiction of residence at diagnosis or current residence.

Jurisdiction of Residence at AIDS Diagnosis: Jurisdiction of residence at time of initial AIDS diagnosis.

Jurisdiction of Residence at Diagnosis: Jurisdiction of residence at the later time of initial HIV diagnosis or time of initial AIDS diagnosis.

Jurisdiction of Residence at HIV Diagnosis: Jurisdiction of residence at time of initial HIV diagnosis.

Late HIV Diagnosis: Percent of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis.

Linked to Care: Percent of adult/adolescent reported HIV diagnoses with a reported CD4 or viral load test performed less than or equal to 1 month or 3 months after their initial HIV diagnosis.

Living HIV Cases with AIDS: Reported HIV diagnoses with an AIDS diagnosis and not reported to have died as of December 31st of the specified year.

Living HIV Cases without AIDS: Reported HIV diagnoses without an AIDS diagnosis and not reported to have died as of December 31st of the specified year.

Mean Years from HIV Diagnosis: Mean or average number of years from initial HIV diagnosis to initial AIDS diagnosis for cases with a reported AIDS diagnosis.

Mean Years from AIDS diagnosis to AIDS Death: Mean or average number of years from initial AIDS diagnosis to death for adult/adolescent reported AIDS diagnoses with a reported death.

Median Count: Median CD4 count (cells per microliter), among adult/adolescent total living HIV cases, of the most recent CD4 test result measured in the specified year.

Median Unsuppressed: Median unsuppressed viral load (copies per milliliter) among adult/adolescent living HIV cases with the most recent viral load test result measured in the specified year of 200 copies per milliliter or greater.

Pediatric Total Living HIV Cases: Reported HIV diagnosis, age less than 13 years at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of December 31st of the specified year.

Percent Change: The percent change in number of adult/adolescent total living HIV cases from residence at diagnosis to current residence.

Percent Alive by Years after AIDS Diagnosis: Percent of adult/adolescent reported AIDS diagnoses not reported to have died at 1 year, 2 years, 5 years and 10 years after initial AIDS diagnosis, by year of AIDS diagnosis.

Percent Late HIV Diagnosis: Percent of adult/adolescent reported AIDS diagnoses with an initial HIV diagnosis less than or equal to 12 months prior to their initial AIDS diagnosis.

Percent Suppressed: Percent of adult/adolescent total living HIV cases with a recent viral load test result measured in the specified year of less than 200 copies per milliliter.

Percent Living with AIDS: The percent of reported HIV diagnoses with an AIDS diagnosis not reported to have died as of December 31st of the specified year

Percent with AIDS by Years after HIV Diagnosis: Percent of adult/adolescent reported HIV diagnoses in the specified year with an initial AIDS diagnosis at 1 year, 2 years, 5 years and 10 years after HIV diagnosis.

Population: Population estimate for July 1, 2017.

Population Age 13+: Population age 13 years or older, estimate for July 1, 2017.

Rate: Number of HIV cases divided by the population and multiplied by 100,000.

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

Recent CD4 Test Result: The most recent CD4 test result measured in the specified year.

Recent Viral Load Test Result: The most recent viral load test result measured in the specified year.

Reported AIDS Deaths: Reported HIV diagnoses with an AIDS diagnosis, reported to have died of any cause during the specified year.

Reported AIDS Diagnoses: Reported HIV diagnoses with an initial AIDS diagnosis during the specified year.

Reported HIV Diagnoses: Reported HIV diagnoses with an initial HIV diagnosis during the specified year.

Residence at Diagnosis: Jurisdiction of residence at later time of initial HIV diagnosis or initial AIDS diagnosis.

Retained in HIV Care: HIV diagnosed with a reported CD4 or viral load test result performed or reported antiretroviral use in the specified year.

Suppressed Viral Load: HIV Diagnosed with the most recent viral load measured in the specified year of less than 200 copies per milliliter.

Total Living HIV Cases: Reported HIV diagnoses with or without an AIDS diagnosis and not reported to have died as of December 31st of the specified year.

Transgender Female: A person whose sex assigned at birth is male but whose gender identity is female.

Transgender Male: A person whose sex assigned at birth is female but whose gender identity is male.

Another Gender Identity: Additional gender identities or gender expressions.

Viral Load With Test: Number and percent of adult/adolescent total living HIV cases with a recent viral load test result.